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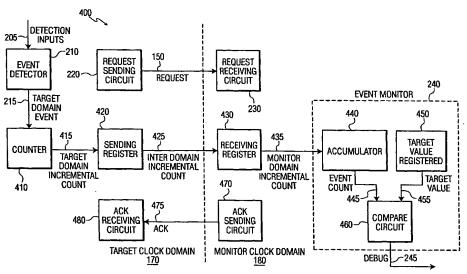
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(54) Title: LOSSLESS TRANSFER OF EVENTS ACROSS CLOCK DOMAINS



(57) Abstract: Transfer circuits (200, 400, 500) for monitoring in a monitor clock domain target events that occur in a target clock domain (170) are disclosed. Some embodiments (200) impose significant constraints on the domain clocks and include: an event detector (210); a sending circuit (220) that changes the value of a request signal (150) with each event; and a receiving circuit (230) that detects changes in the request signal. Other embodiments work for a broader range of clocks and include: a counter (410) that generates an incremental count (415) of event occurrences while a transfer is taking place; sending and receiving registers (420, 430, 530) for the incremental count; the request sending and receiving circuits (220, 230), where the request signal changes value for each transfer of the incremental count; and sending and receiving circuits (470, 480) for an acknowledgement signal.

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